

Amendments to the Claims:

The following listing of claims will replace all previous listings and versions of the claims:

1. (Previously Presented): An electrical power system for supplying continuous power to a load, comprising:

 a static converter continuously converting input power to a fixed frequency AC output power;

 an electrical power storage subsystem;

 an electrical power generator; and

 a control system coupled with the static converter, the electrical power storage subsystem, and the electrical power generator, such that continuous backup power is provided to the load by both the electrical power storage subsystem and the electrical power generator simultaneously and cooperatively.

2. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system provides a plurality of modes of operation including at least a static compensator (STATCOM) operational mode and an uninterruptible power supply (UPS) operational mode.

3. (Canceled)

4. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system further provides a multiplicity of generator connection modes, including at least a dc-connected generator mode and an ac-connected generator mode.

5. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system comprises a feedback loop.

6. (Previously Presented): The electrical power system as claimed in claim 1, wherein:

the control system comprises:

a current control system coupled with the electrical power storage subsystem and the electrical power generator; and

a voltage control system coupled with at least the electrical power storage subsystem.

7. (Previously Presented): The electrical power system as claimed in claim 6, wherein:

the current control system includes a current controller coupled with a pulse pattern generation unit; and

the pulse pattern generation unit couples with the electrical power storage subsystem and is configured to supply control signals to the electrical power storage subsystem.

8. (Previously Presented): The electrical power system as claimed in claim 7, wherein:

the voltage control system includes a voltage source converter (VSC) voltage controller coupled with the pulse pattern generation unit; and

the pulse pattern generation unit couples with the electrical power storage subsystem and is configured to supply control signals to the electrical power storage subsystem.

9. (Previously Presented): The electrical power system as claimed in claim 8, wherein:

the energy storage system includes a voltage source converter (VSC) coupled with an energy storage unit, wherein the energy storage unit is configured to store electrical energy, and the VSC is configured to draw energy from the energy storage unit and supply electrical energy to the energy storage unit.

10. (Previously Presented): The electrical power system as claimed in claim 6, wherein:

the control system further includes a detection and mode selection unit coupled with the current control and the voltage control, and configured to determine the mode of operation of the apparatus.

11. (Previously Presented): The electrical power system as claimed in claim 10, further comprising:

a solid state breaker (SSB) coupled with the detection and mode selection unit and with a grid and configured to decouple a load from the grid; and

the detection and mode selection unit is configured to signal the SSB to open and close.

12. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a battery.

13. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a flywheel.

14. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises superconducting magnets (SMES).

15. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises an electrochemical capacitor.

16. (Previously Presented): The electrical power system as claimed in claim 1, wherein the storage subsystem comprises a compressed air energy storage system (CAES).

17. (Previously Presented): The electrical power system as claimed in claim 1, wherein the control system includes at least one storage control module specifically configured for controlling the operation of the electrical power storage subsystem.

18. (Canceled)

19. (Previously Presented): The electrical power system as claimed in claim 17, wherein the storage control module is chosen from the group comprising: a software configuration, a hardware configuration, and a combination of a software and a hardware configuration.

20. (Previously Presented): The electrical power system as claimed in claim 2, wherein the control system includes at least one electrical power generator control module specifically configured for controlling the operation of the electrical power generator.

21. (Previously Presented): The electrical power system as claimed in claim 20, wherein the electrical power generator control module is interchangeable with a second electrical power generator control module that is specifically configured for controlling the operation of a second electrical power generator.

22. (Previously Presented): An apparatus for providing electrical power, comprising:

a static compensator (STATCOM);

an uninterruptible power supply (UPS);

an electrical power generator; and

a multimode control system coupled with the STATCOM, the UPS, and the electrical power generator, wherein the multimode control system controls the operation of each of the STATCOM, the UPS, and the electrical power generator, such that the STATCOM, the UPS, and the electrical power generator simultaneously and cooperatively provide reactive power and real electrical power in any combination before, during, or after a disturbance or outage on an electrical grid.

23. (Canceled)

24. (Previously Presented): The apparatus as claimed in claim 22, wherein:

the control system includes at least:

a current control system coupled with the STATCOM, the UPS, and the generator to provide control for the STATCOM, the UPS, and the generator; and

a voltage control system coupled with at least the UPS to provide control for the UPS.

25. (Previously Presented): The apparatus as claimed in claim 22, wherein:

the control system includes at least:

a current control system coupled with the STATCOM and the UPS to provide control for the STATCOM and the UPS; and

a voltage control system coupled with at least the UPS to provide control for the UPS.

26. (Previously Presented): The apparatus as claimed in claim 25, wherein:

the control system includes: a detection and mode selection unit coupled with the current control system and the voltage control system to signal the current control system and the voltage control system to activate and deactivate the current control system and the voltage control system.

27. (Previously Presented): The apparatus as claimed in claim 26, wherein the STATCOM includes at least a voltage source converter (VSC) coupled with an energy storage unit, wherein the VSC provides at least reactive power injection or absorption.

28. (Canceled)

29. (Previously Presented): The apparatus as claimed in claim 27, wherein the energy storage unit is chosen from the group comprising: a battery, a flywheel, superconducting magnets (SMES), an electrochemical capacitor, and combinations thereof.